

CYBA 基因 A640G 多态性与精神分裂症易感性及认知功能的关系

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【摘要】 目的 探讨 NADPH 氧化酶 p22phox 亚基基因(CYBA 基因) A640G 多态性和精神分裂症的易感性及其疾病严重程度、认知功能的相关性。方法 选取 2013 年 1 月至 2015 年 8 月在我院住院的 406 例中国汉族人群精神分裂症患者作为观察组, 选取同期到我院参加健康体检者 485 例作为对照组, 采集血标本提取 DNA 后应用 SNaPshot 技术进行 CYBA 基因 A640G 多态性检测, 比较两组受检者的基因型、等位基因频率分布差异; 采用阳性和阴性症状量表(PANSS)评估患者精神症状严重程度, 采用简明精神分裂症认知评估测验(BACS)评估首发患者的认知功能, 比较观察组各基因型的 PANSS、BACS 量表的得分差异。结果 (1) 观察组患者的 GG、GA、AA 基因型频率和正常对照组比较差异均无统计学意义(41.6% vs 39.8%、45.8% vs 46.8%、12.6% vs 13.4%, $P>0.05$); G、A 等位基因频率和正常对照组比较差异均无统计学意义(64.5% vs 63.2%、35.5% vs 36.8%, $P>0.05$); 观察组患者 GG、GA、AA 基因型的 PANSS 量表总分及各分量表的得分比较差异均无统计学意义($P>0.05$)。 (2) AA 基因型患者在 BACS 量表语义流畅性测验、字词流畅性测验平均分显著高于 GG 基因型患者且差异均有统计学意义[(42.30 ± 15.30)分 vs (33.93 ± 11.23)分, (13.96 ± 6.40)分 vs (10.51 ± 5.09)分, $P<0.05$]。结论 CYBA 基因 A640G 多态性与精神分裂症的认知功能障碍存在明显相关, 但与精神分裂症的易感性及其症状严重程度无明显相关。

【关键词】 精神分裂症; NADPH 氧化酶; 基因多态性; 认知功能; 相关性**【中图分类号】** R749.3 **【文献标识码】** A **【文章编号】** 1003—6350(2016)15—2424—04

Relationships between CYBA gene A640G polymorphism and susceptibility and cognitive function of schizophrenia. LUO Xu-dong, LIN Ju-da, ZOU Xiao-bo, YE Xiao-qing. Department of Psychiatry, Affiliated Hospital of Guangdong Medical University, Zhanjiang 524001, Guangdong, CHINA

【Abstract】 Objective To investigate the relationship between the NADPH oxidase p22phox subunit gene (CYBA gene) A640G polymorphism and susceptibility, disease severity, cognitive function of schizophrenia. **Methods** A total of 406 Chinese Han Population patients with schizophrenic in our hospital from January 2013 to August 2015 were selected as research group, and 485 healthy subjects for physical examination were enrolled as the control group. CYBA gene A640G polymorphism was detected by SNaPshot after extracting DNA from blood samples, and the genotype and allele frequency distributions between the two groups were compared. The positive and negative symptom scale (PANSS) was used to assess the severity of psychiatric symptoms, and the cognitive function of first-episode patients were assessed by brief assessment of cognition in schizophrenia (BACS). The scores difference of PANSS and BACS of each genotype were compared in the research group. **Results** (1) There were no significant differences in GG, GA, AA genotype frequency between the two groups (41.6% vs 39.8%, 45.8% vs 46.8%, 12.6% vs 13.4%, $P>0.05$); G, A allele frequency in research group and control group showed no statistically significant difference (64.5% vs 63.2%, 35.5% vs 36.8%, $P>0.05$). The PANSS scale total score and the scores of each component of GG, GA, AA genotype in research group showed no statistically significant difference ($P>0.05$). (2) The average score of BACS volume table semantic flu-

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